



King County

# Small Habitat Restoration Program Annual Report 2013

Enhancing streams and wetlands for community, fish, and wildlife



**King County**

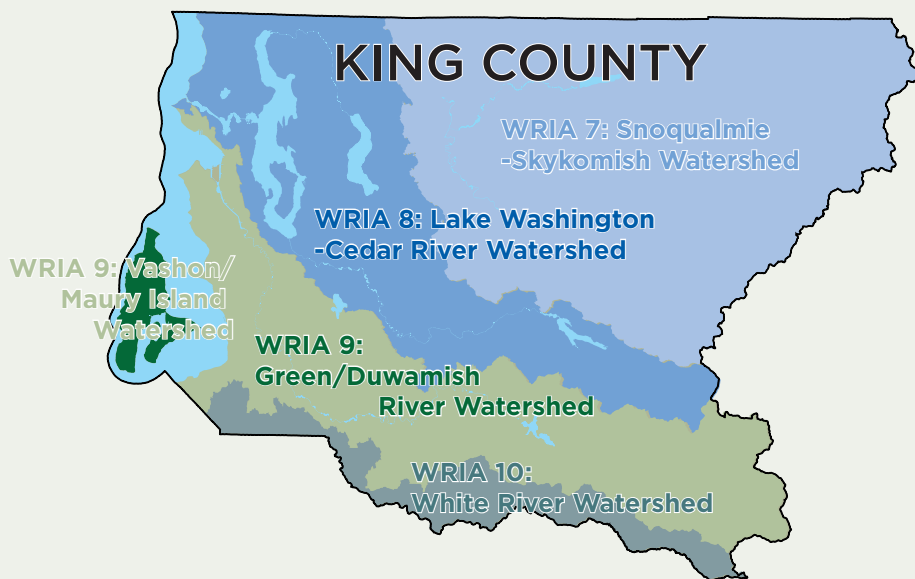
Department of Natural Resources and Parks  
Water and Land Resources Division

[www.kingcounty.gov/shrp](http://www.kingcounty.gov/shrp)

## Community Spotlight

# Coalfield Park Buffer Enhancement and Interpretive Signs

Working with Community Alliance to Reach Out and Engage (CARE), King County Parks, and a King County Community Partnership Grant, the Small Habitat Restoration Program (SHRP) developed interpretive signs and a kiosk that was installed in Coalfield Park. SHRP controlled blackberry and other invasive weeds along the buffer of Honey Creek, which runs through the park.



## PROJECT PARTNERS



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**Back Cover** | **SHRP Mission**





# 2013 Program Summary and Accomplishments



In 2013, the Small Habitat Restoration Program (SHRP) constructed and maintained 43 habitat projects to enhance and restore streams, wetlands, and riparian buffers throughout King County. SHRP staff worked with 30 private property owners to enhance fish and wildlife habitat on their property.

## PROGRAM HIGHLIGHTS:

**21** new construction or phased planting projects

**22** projects maintained and monitored

**1.7** miles of streambank restored

**18.7** acres of riparian buffer restoration

**2.25** acres of wetland habitat restored

**132** pieces of large woody debris installed; and

**36,425** native trees, shrubs and non-woody plants installed

SHRP leveraged its funds with grants. In 2013, grant funding for SHRP totaled over **\$143,000**. Grant Partners include: the Department of Ecology, the King Conservation District and the Rose Foundation. Forging new partnerships with private landowners and grant agencies allows the program to maximize limited public funding to improve water quality and enhance habitat for fish, wildlife and future generations.

Spotlight projects within King County's Watershed Resource Inventory Areas (WRIAs) showcase successful collaborations with private property owners, homeowner associations, community groups, non-profit organizations, and public agencies. These multi-year projects typically involve site preparation, phased native plantings, and maintenance.

## Spotlight projects include:

### **WRIA 7:** **Snoqualmie** **-Skykomish Watershed** Tolt River Restoration

Seven county-owned properties along the Tolt River were planted with natives to establish a riparian buffer in flood prone areas. SHRP project manager, Cindy Young, implemented the planting using SHRP funds.

### **WRIA 8:** **Lake Washington -** **Cedar River Watershed** Huselson and Dean Buffer Restoration

Along the Cedar River, SHRP project manager Laura Hartema converted flood prone rural residential properties to forested buffer. The 2.5 acre planting is the first in a series of future floodplain restoration projects along the Cedar. Long term, reach-wide goals are to remove or set back adjacent revetments to allow the river to reclaim the newly forested floodplain.

### **WRIA 9:** **Green/Duwamish Watershed** Zech Newaukum Buffer Enhancement

Along Newaukum Creek, property owners were interested in restoring highly degraded buffers back to healthy salmon habitat. SHRP project manager Cody Toal worked with the owners to develop a plan that protects 600 feet of stream and over 4 acres of enhanced buffer.

### **Vashon/Maury Island** Anderson and Eagleson Properties, Judd Creek Habitat Enhancement

SHRP project manager, Paul Adler, and project partners harvested over 100 trees and placed them along two reaches of Judd creek to enhance aquatic habitat for fish, including coho salmon and trout.

## Project Spotlight 1: WRIA 7 Snoqualmie-Skykomish Watershed Tolt River Habitat Restoration (TRR)

### Conservation Significance:



Along the Tolt River, five projects were performed across properties purchased as part of a flood buyout program. Residential structures were removed and riparian buffers were planted. The native plantings will provide habitat for wildlife and salmonids as the river migrates into the properties. In total, 3,774 plants were installed along 802 feet of riverbank. The total planting area was more than 6 acres.

### Project History:

These parcels are in areas that often flood. The Snoqualmie Basin Steward prioritized the property acquisitions and the River and Floodplain Management Section purchased the properties. The acquisitions were funded by the Flood District and grants from the Salmon Recovery Funding Board, King Conservation District, Cooperative Watershed Management (Flood District) Conservation Futures and the Parks Levy.



*Moran Project before planting*



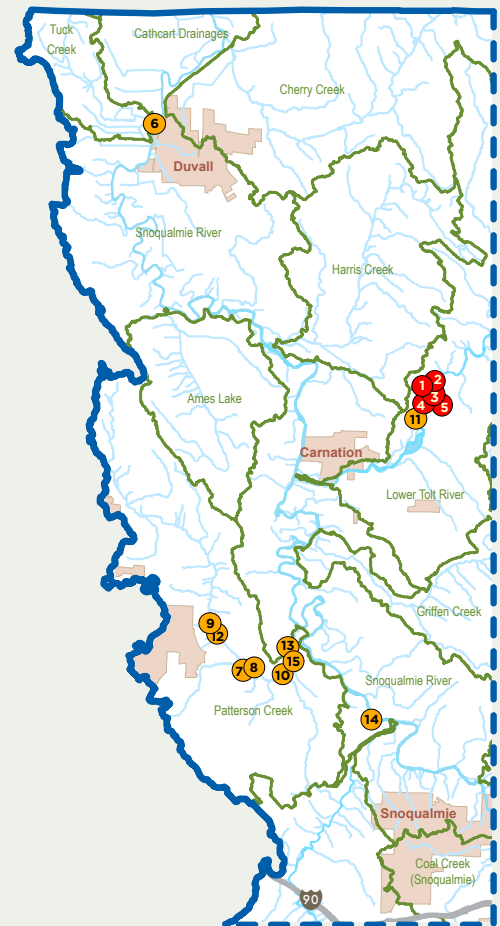
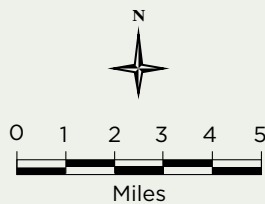
*Moran Project after planting*





### SHRP 2013 Projects: WRIA 7 Snoqualmie-Skykomish Watershed

- 2013 Construction Project
- 2013 Maintenance & Monitoring Project
- WRIA 7 Boundary
- Basin Boundary



	Project	Project Status	Property Ownership	Trees Planted	Non-woody plants installed	Shrubs Planted	Streambank Restoration Linear Ft	Riparian Buffer Restoration Sq Ft
<span style="color: red;">1</span>	Moran/Wait TRR	New	Public	590	40	500	200	107,930
<span style="color: red;">2</span>	McClosky/Mouncy TRR	New	Public	425	50	600	300	106,405
<span style="color: red;">3</span>	Estopa TRR	New	Public	230	40	225	82	12,000
<span style="color: red;">4</span>	Stansbury TRR	New	Public	130	50	240	110	20,000
<span style="color: red;">5</span>	Thornquist TRR	New	Public	300	113	241	110	17,000
				<b>1,675</b>	<b>293</b>	<b>1,806</b>	<b>802</b>	<b>263,335</b>

- 6 Andrews Tuck Creek Riparian Planting
- 7 Aldarra Patterson Riparian Planting
- 8 Condit Patterson Creek Restoration
- 9 Crittenden Patterson Riparian Planting
- 10 Gordon Patterson Riparian Planting

- 11 Heintz/Mernikas/Valenta Tolt River Restoration
- 12 Lee Patterson Riparian Planting
- 13 Mike Lein Patterson Creek Restoration
- 14 Quigley Park Snoqualmie Riparian Planting
- 15 Patrick Lein Patterson Creek Restoration



*Huselton mulch delivery.*



*Huselton planting December 2013.*



*Crew planting Dean property.*

## **Project Spotlight 2: WRIA 8 Lake Washington- Cedar River Watershed**

### **Huselton and Dean Cedar River Planting**

Two flood-prone, private properties totaling 5.5 acres along the Cedar River were acquired by King County as part of a Flood Buyout Program. The parcels are included in a larger, reach-wide restoration goal to reforest the buffer and remove or setback the adjacent revetments. This would allow the river to reclaim the floodplain and increase the area of aquatic habitat available to salmon.

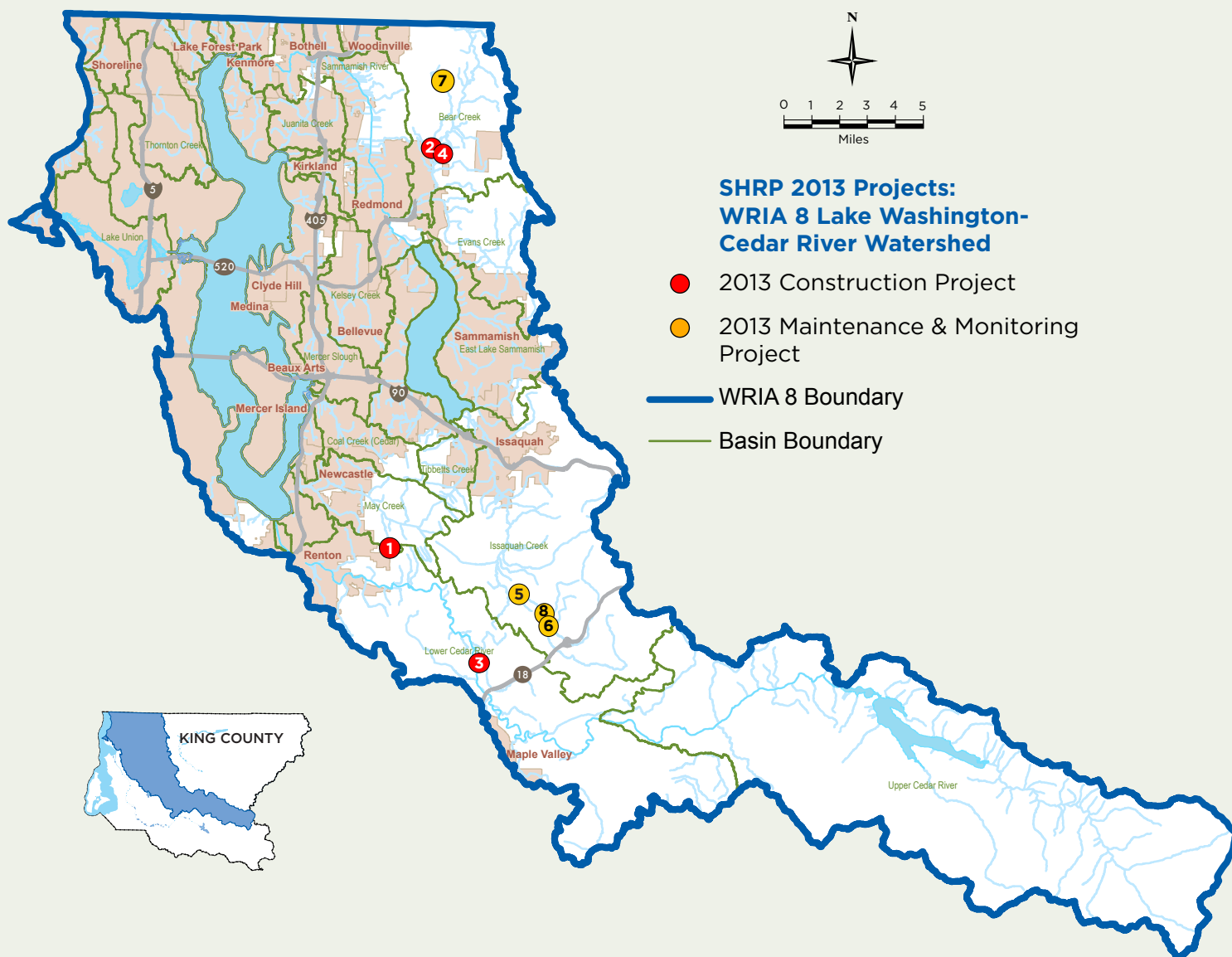
In 2013, invasive weeds were controlled and 2.5 acres were planted with 4,125 trees and 800 shrubs. The planting of these two parcels is the first in a series of future floodplain restoration projects that will convert past rural residential use and mowed pasture to a forested buffer.

The forested habitat will benefit fish and wildlife, create floodplain roughness and provide large wood to the river once the revetments are removed, in the future.

The planting will be weeded and watered as necessary from 2014-2016. Additional plants will be installed in 2014 to expand the buffer and continue efforts to reforest the site.







	Project	Project Status	Property Ownership	Trees Planted	Shrubs Planted	Acres of Wetland Habitat Restored or Enhanced	Streambank Restoration Linear Ft	Riparian Buffer Restoration Sq Ft
1	Cemetery Ponds Wetland Enhancement	Phased	Public			1		
2	Craig Property Bear Buffer Enhancement, SHRP	Phased	Private	100			310	9,000
3	Huselton and Dean Cedar River Planting	New	Public	4,125	800		975	108,900
4	Lien Bear Creek Buffer Enhancement	Phased	Private	955	191		800	52,000
				<b>5,180</b>	<b>991</b>	<b>1</b>	<b>2,085</b>	<b>169,900</b>

- 5 Ahlstrom Issaquah Riparian and Wetland Restoration
- 6 Bonomi Middle Issaquah Creek Maintenance
- 7 Cottage Lake Creek Enhancement
- 8 Ellis Middle Issaquah Bank Stabilization



*Zech Project after livestocking*



*Plants staged after a delivery*



*Staging the livestockes*



*Potted plants placed in grubbed areas*

## Project Spotlight 3A: WRIA 9 Green/Duwamish River Watershed Zech Newaukum Buffer Enhancement

### Project History:

The property owners responded to an outreach letter sent out in 2012. They were interested in restoring the buffers back to healthy salmon habitat. The riparian buffers were highly degraded, previously cleared and were dominated by reed canary grass and other invasive plants. In 2012, invasive blackberry and bittersweet nightshade were removed from the stream buffer and the east side was planted with 4,050 trees and shrubs. In 2013, 7,875 trees and shrubs were planted on the west side.

Overall, 15,025 trees and shrubs have been planted and over 4 acres have been restored on this property. This project was funded by King County SWM funds as well as a Department of Ecology Improving Water Quality and Habitat through Riparian Restoration Grant (east side) and a Department of Ecology Direct Implementation Funding Grant (west side).

### Conservation Significance:

Newaukum Creek is used by several fish species including Chinook, steelhead, chum, pink, and coho salmon. The stream is designated "a critical spawning area for Chinook, steelhead, and coho," thereby elevating the stream's

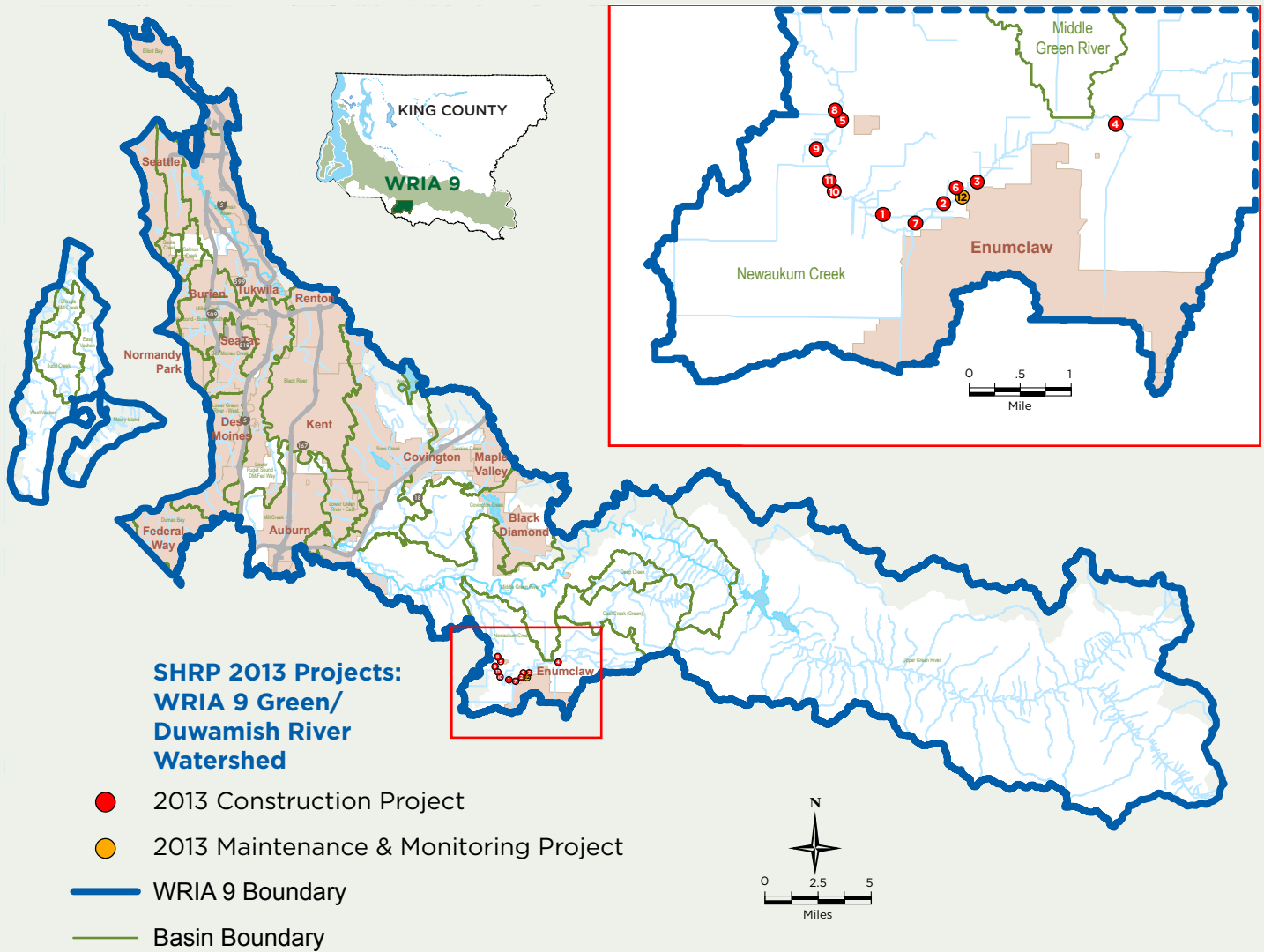
importance for maintaining salmon populations in the Green River watershed.

### Science in Action:

SHRP worked with the CIP Monitoring and Maintenance Program to develop and implement a livestock size classification mortality study on the east side of the property with 3,475 livestockes installed in 30 experimental plots. These plots will be monitored for several years to better understand how the diameter of livestockes affects their survival.







	Project	Project Status	Property Ownership	Trees Planted	Shrubs Planted	Acres of Wetland Habitat Restored or Enhanced	Streambank Restoration Linear Ft	Riparian Buffer Restoration Sq Ft
1	Big Springs Natural Area Newaukum Creek Buffer Enhancement	Phased	Public		6,000		1,000	42,000
2	Brewer Phase 2 Newaukum Buffer Enhancement	Phased	Private	50			100	2,000
3	Collard Newaukum Buffer Enhancement	Phased	Private	350	3,150		526	105,200
4	Fallen Phase 2 Newaukum Buffer Enhancement	Phased	Private	70			150	3,000
5	Lopez Newaukum Pond and Riparian Planting	Phased	Private	20				9,350
6	Newaukum Natural Area Buffer Enhancement	Phased	Public		1,000		650	3,000
7	Rosatto Newaukum Riparian Planting	Phased	Private	175			2,000	32,000
8	Walker Newaukum Buffer Enhancement	Phased	Private	215			600	30,000
9	Westby East Newaukum Buffer Enhancement	Phased	Private	75			100	30,000
10	Zech Newaukum Buffer Enhancement	Phased	Private	3,475	4,400	1.25	600	55,000
11	Zech West Newaukum Buffer Enhancement	Phased	Private	650	6,850		600	32,000
				<b>5,080</b>	<b>21,400</b>	<b>1.25</b>	<b>6,326</b>	<b>381,550</b>

12 Magnusson Newaukum Creek Habitat Enhancement



Completed LWD placement ready for planting

LWD complexes in Judd Creek

Spider Hoe placing LWD in Judd Creek

### Project Spotlight 3B: WRIA 9 Vashon/Maury Island

## Anderson and Eagleson Properties, Judd Creek Habitat Enhancement

This project is located in the Judd Creek Watershed, the largest watershed on Vashon Island and the largest single source of fresh water into Quartermaster Harbor and the Maury Island Aquatic Reserve. The property was acquired by King County Department of Natural Resources and Parks and the Vashon-Maury Island Land Trust (VMILT). Acquisition and restoration of the property in this priority habitat protection area has been ongoing since 2006.

In 2013, SHRP harvested over 100 trees from an upland forest on the property and placed them into two reaches

of Judd creek to enhance aquatic habitat for native trout and coho salmon. In total, 132 logs were placed in 29 log complexes along 2,000 linear feet of creek. Of these, 72 logs were placed in 15 complexes in the Anderson Reach and were installed using a conventional excavator. In the Eagleson Reach, 60 logs were winched through the buffer of Judd creek and installed in 14 log complexes using a unique machine called a spider hoe, also known as a walking excavator. This highly mobile equipment minimized the impacts to riparian vegetation and to the creek buffer.

This project was highlighted in an article in *The Vashon-Maury Island Beachcomber*. Susan Reimer, journalist for *The Beachcomber*, who toured the site during construction by the spider hoe, said it's hard to believe that big excavator went through this little creek. It looks like these logs belong here.

Project partners include: The Green/Duwamish and Central Puget Sound Watershed Forum (WRIA 9), SHRP, VMILT, Vashon Forest Stewards and King County Department of Natural Resources.





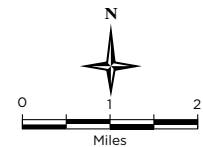
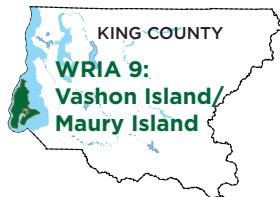
# **SHRP 2013 Projects: WRIA9 Vashon/Maury Island Watershed**

● 2013 Construction Project

● 2013 Maintenance  
& Monitoring Project

— WRIA 9 Boundary

— Basin Boundary



Project	Project Status	Property Ownership	Large Woody Debris Installed
<span style="color: red;">1</span> Anderson and Eagleson Properties, Judd Creek Habitat Enhancement	New	Public	132

- 2 Douglas Judd Creek Enhancement
- 3 Manzanita Natural Area Ivy Removal
- 4 Northilla Area Ivy Removal
- 5 Maury Island Marine Park

- 6 Palmer Judd Creek Buffer Planting
- 7 Raabs Lagoon Estuary Enhancement
- 8 Singer Judd Creek Pond Enhancement



## Our Mission:

*"Enhancing streams and wetlands for community, fish, and wildlife"*

The Small Habitat Restoration Program (SHRP) works with local property owners and public agencies to design, permit, and construct habitat enhancement projects at no cost to the property owner.



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